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Filed: January 29, 2004 Amendment and Reply Inventors: Richard A. Gambale et al.

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The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the claims in the present application:

## Listing of The Claims:

1. (Currently amended) A method for stimulating angiogenesis within <u>myocardial</u> tissue a <u>muscle</u>, comprising:

employing a delivery system for accessing the <u>myocardial tissue</u> <del>muscle</del>, penetrating the <u>myocardial tissue</u> <del>muscle</del>, and

operating the delivery system for enclosing within the <u>myocardial tissue</u> musele at least one body formed of a biocompatible material and dimensionally adapted for being enclosed within the <u>myocardial tissue</u> musele, wherein said body defines a lumen that is adapted to maintain an open cavity in the tissue sufficient to permit blood pooling in the lumen and the body comprises external projections configured to create cavities between the tissue and the body sufficient to permit blood pooling in the cavities, to thereby stimulate angiogenesis.

- 2. (Original) A method according to claim 1, wherein employing a delivery system includes employing a catheter delivery system.
- 3. (Currently amended) A method according to claim 1, wherein employing a delivery system for accessing the <u>myocardial tissue</u> muscle includes guiding a catheter delivery system through a patient's vascular system.
- 4. (Cancelled) A method according to claim 1, wherein penetrating the muscle includes penetrating a muscle comprising the myocardial wall of a heart.
- 5. (Currently amended) A method according to claim 1, wherein penetrating the myocardial tissue muscle includes driving a distal portion of the delivery system into the myocardial tissue muscle.

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6. (Currently amended) A method according to claim 1, wherein penetrating the myocardial tissue muscle includes driving the at least one body into the myocardial tissue muscle.

- 7. (Currently amended) A method according to claim 1, wherein operating the delivery system includes operating a delivery system that substantially seals the at least one body within the myocardial tissue muscle.
- 8. (Currently amended) A method according to claim 1, wherein operating the delivery system for enclosing at least one body within the myocardial tissue musele includes implanting a plurality of bodies within the myocardial tissue muscle.
- 9. (Currently amended) A method according to claim 1, wherein operating the delivery system for disposing at least one body within the myocardial tissue muscle includes implanting at least one body adapted for promoting blood pooling within the myocardial tissue muscle.
- 10. (Currently amended) A method according to claim 1, wherein operating the delivery system includes operating the delivery system for delivering into the myocardial tissue muscle an agent for promoting angiogenesis.
- 11. (Currently amended) A method for stimulating angiogenesis within myocardial the tissue of a muscle, comprising:

accessing the myocardial tissue muscle with a delivery system, penetrating the myocardial tissue muscle, and

releasing within the myocardial tissue muscle at least one body formed of a biocompatible material and dimensionally adapted for being enclosed within the myocardial tissue muscle, wherein said body defines a lumen that is adapted to maintain an open cavity in the tissue sufficient to permit blood pooling in the lumen and the body comprises external projections configured to create cavities between the tissue and the body sufficient to permit blood pooling in the cavities, to thereby stimulate angiogenesis, said biocompatible material

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being capable of inciting an inflammatory reaction with the tissue of the <u>myocardial tissue</u> muscle.

12. (Currently amended) A method for promoting angiogenesis within <u>myocardial</u> the tissue of a muscle, comprising:

accessing the <u>myocardial tissue</u> muscle with a delivery system, penetrating the <u>myocardial tissue</u> muscle,

releasing within the <u>myocardial tissue</u> muscle at least one flexible body dimensionally adapted for implantation within the <u>myocardial tissue</u> muscle, said body having been subjected to deforming stress prior to its release within the <u>myocardial tissue</u> muscle and said body dynamically approximating the recovery of its native configuration after its implantation, and

withdrawing the delivery system from its proximity to the <u>myocardial tissue</u> muscle.

13. (Currently amended) A method for promoting angiogenesis within <u>myocardial</u> the tissue of a muscle, comprising:

accessing the <u>myocardial tissue</u> muscle with a delivery system, penetrating the <u>myocardial tissue</u> muscle,

releasing within the <u>myocardial tissue</u> muscle a body formed of a heat responsive material, said body undergoing dimensional change upon exposure to intramuscular heat, and withdrawing the delivery system from its proximity to the <u>myocardial tissue</u> muscle.

## 14-32. (Cancelled)

33. (Currently amended) A method according to claim 1, wherein the body comprises a spring, further comprising at least one opening between the coils of the spring in the body open to the lumen.

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34. (Previously presented) A method according to claim 1 further comprising a drug releasing compound retained by a surface of the body.

- 35. (Currently amended) A method according to claim 34 wherein the drug releasing compound is contained within an internal reservoir a lumen of the body.
- 36. (Previously presented) A method according to claim 34 wherein the drug releasing compound is applied to a surface of the body by a coating.
- 37. (Previously presented) A method according to claim 34 wherein at least a portion of the body is formed from a drug releasing compound.
- 38. (Previously presented) A method according to claim 1 further comprising a radiation source carried by the body.
- 39. (Currently amended) A method according to claim 1, where the body is flexible and comprises a bellows for expanding and contracting responsive to <u>myocardial tissue</u> <del>muscle</del> relaxation and contraction and wherein the external projections are defined by annular ripples.
- 40. (Previously presented) A method according to claim 1, where the body is flexible and comprises a plurality of tighter pitch spring sections connected by two open pitch spring elements, where the external projections are defined by the tighter pitch spring sections.
- 41. (Previously presented) A method according to claim 1, where the body is coneshaped with a distal tip, and the external projections are a series of barbs on the external surface.
- 42. (Currently amended) A method according to claim 39, where the body further comprises an enclosed cavity and a port at least one opening in the body open to the cavity lumen and a drug releasing compound contained within the cavity lumen of the body, where during contraction of the bellows the compound diffuses through the port opening in the body.

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43. (New) A method according to claim 1, wherein the body is cone-shaped, further comprising a central tapered cavity with a proximal opening and a solid distal tip.

- (New) A method according to claim 33, further comprising a drug releasing 44. compound retained within the lumen of the spring.
- (New) A method according to claim 44, further comprising a drug releasing 45. compound retained within the central tapered cavity.